

Remarks

Claims 1-19 are the claims now remaining in the case. Claims 20-35 have been cancelled. The remaining claims have been amended to clarify and emphasize their distinction from the prior art and overcome the rejections.

35 U.S.C. § 102

Claims 1, 2, and 6 have again been rejected under 35 USC 102(b) as anticipated by Kim, U.S. Patent No. 4,442,132.

The rejection is respectfully traversed, because Kim does not in fact provide an enabling disclosure of applicant's invention to one skilled in the art.

As stated in the specification at page 8 lines 10-20, page 16 lines 4-20 and in the working examples, and claimed in claims 1, 2, and 6, the present invention provides a baking mixture such as batter or dough for baking heat-deformable and in fact heat-deformed non-perishable baked goods characterized by a diminished level of sweet taste made from flours and/or starches and having certain physical properties. The claims have been amended to clarify that "made from flours and/or starches" means that flours and/or starches are present in major proportion, as shown by the working examples where the lowest proportion of flour and/or starch is calculated as 59.1% by weight of all ingredients except water. In total

contrast, Kim discloses a baking composition in which, to provide physiological acceptability for diabetics, the content of digestible carbohydrate, is 10% maximum, and the content of flour and/or starch is 15% maximum.

The physical properties of the claimed product, differing from Kim's disclosure, include in particular a plastic state at an elevated temperature that facilitates processing, a diminished level of sweet taste, and a crispy and brittle texture at ambient temperature. No baking mixture or resulting baked product having these properties are disclosed by Kim. The Examiner acknowledges this, noting that "Kim merely teaches that the product becomes soft quickly" but concludes that "it is not seen how this differs from the claimed invention, as crispiness maintenance times are not claimed."

It is respectfully pointed out that a product that does not remain crispy until it reaches the consumer after the time required to pass through the customary commercial distribution channels is not a crispy product and hence is not the claimed product. However, in the interest of concluding prosecution the claims have been amended to require a glass transition temperature above room temperature, which is a readily ascertainable quantitative measure of brittleness. No such property is disclosed by Kim.

Moreover, Kim nowhere discloses a baking mixture or resulting baked product that has been deformed after baking in a heated plastic state, as required in accordance with claims 1, 2, and 6.

A proper rejection under 35 U.S.C. § 102(b) requires one reference to disclose each element of the rejected claim. Elements not disclosed by Kim have been identified in each of claims 1, 2, and 6. Hence claims 1, 2, and 6 are not anticipated by Kim. The rejection should be withdrawn.

Claims 1, 2, and 11 have been rejected under 35 U.S.C. § 102(b) as anticipated by Kondo, an English language abstract of Japanese specification 01312960A.

The rejection is respectfully traversed, because Kondo does not in fact provide an enabling disclosure of the present invention to one skilled in the art.

Kondo discloses a mixture of saccharides composed of 25-75 wt.% meso-erythritol and 75-25% wt.% at least one saccharide selected from sugar and sugaralcohol other than meso-erythritol used as edulcorant in a kneaded powder cake.

As already pointed out above, the present invention requires the claimed bakery mixtures to have the property of being

deformable in a heated plastic state and the resulting baked products to have been so deformed. No such deformable baking mixture or resulting baked product having been deformed are disclosed by Kondo.

In addition, claims 1 and 2 require erythritol and/or xylitol to be present in the baking mixture of the invention in specified proportions expressed in weight per cent of the amount of flour and/or starch present in the mixture in major proportion. No proportions of erythritol and/or xylitol to flour and/or starch are disclosed by Kondo.

Claim 11 requires a baked product having been deformed at an elevated temperature and characterized by a brittle and crispy texture at room temperature, a glass transition temperature above room temperature, and a diminished level of sweetness, comprising, among other ingredients water in an amount not exceeding 10% by weight per cent of the total quantity of flour and starch, and an effective plasticizing amount of at least one aliphatic polyol having four to five carbon atoms and an alcoholic hydroxyl group linked to each carbon atom. While erythritol is indeed an aliphatic polyol with four carbon atoms and xylitol is an aliphatic polyol with five carbon atoms, Kondo does not disclose a controlled amount of water or a plasticizing amount of aliphatic polyol. Moreover, Kondo nowhere discloses a baked product characterized by a

brittle and crispy texture at room temperature or a glass transition temperature above room temperature.

A proper rejection under 35 USC 102(b) requires one reference to disclose each element of the rejected claim. Elements not disclosed by Kondo have been identified in each of claims 1, 2, and 11. Hence claims 1, 2, and 11 are not anticipated by Kondo. The rejection should be withdrawn.

35 U.S.C. § 103

Claims 1-19 have been rejected as being unpatentable over the combined teachings of Kim and Kondo.

It is acknowledged that the claims differ as to the specific type of baked product and the amounts used. It is noted, however, that "Kim clearly teaches the use of xylitol as a sugar replacer. Kondo clearly teaches the use of erythritol as a sugar replacer. Kim and Kondo teach the claimed components and a resulting baked product where deformability at an elevated temperature would be no more than obvious as the same components are used . . . ."

As already pointed out, however, neither Kim nor Kondo disclose a product made of flours and/or starches in major proportion. Such a product is contrary to the specific

teaching of Kim and would defeat Kim's purpose of suitability for diabetics.

A totally unexpected property and consumer benefit of the product of the present invention is the reduced level of sweetness, opening the possibility of products with a neutral taste (see claim 17). Kim and Kondo use xylitol and erythritol to replace sugar because they are sweet. Note in this connection Kim's statement that

The caloric value of lactitol amounts only to maximally half of that of saccharose so that in diabetic products this sugar alcohol is preferred to sorbitol and xylitol both having the same caloric value as saccharose.

Having the same caloric value as saccharose (sugar), xylitol might be expected to provide approximately equal sweetness. A totally unexpected property of xylitol and erythritol in bakery products, not taught or suggested by either Kim or Kondo but discovered by the present inventors, is their great efficiency as plasticizers in facilitating the elevated temperature processing of the products at a greatly reduced use level, such that one part by weight of these polyols can replace 2-3 parts by weight of sugar (see specification at page 15 lines 18-25).

The rejection again seeks support in *In re Boesch* for categorizing "the amount and manipulation of these components" (i.e. erythritol and xylitol) "as no more than optimization",

and in *In re Kerkhoven* and *In re Gershon* for the contention that "the claims are drawn to a combination of known components which produces expected results."

The Examiner's attention is respectfully called to the previous response for an analysis of these cases and an explanation how the claimed invention differs significantly from the facts considered by the court in rejecting the claims presented in each of these cases. That analysis and explanation are believed to be fully applicable to the present claims, and the Examiner is respectfully urged to consider it as if here reiterated verbatim.

As explained above, it is respectfully submitted that claims 1-19 define patentable subject matter and are in order for prompt allowance, which is respectfully solicited.

Respectfully submitted,



For Applicants

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